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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/504,964	02/16/2000	Yasuhiko Shinjo	CU-2130-RJS	6722

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EXAMINER

CHEN, TIANJIE

ART UNIT	PAPER NUMBER
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2652

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DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/504,964

Applicant(s)

SHINJO ET AL.

Examiner

Tianjie Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

2nd Non-Final Rejection (RCE)

Double Patenting

1. Applicant is advised that should claim 1 be found allowable, claim 2 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagata et al (US 5,095,397).

With regard to claim 1, Nagata et al shows a magnetic head device in Fig. 2 including: a base member 1 made of nonmagnetic material (Column 2, lines 52-53); a thin-film magnetic head 2+10+7+11 which is in contact with the base member 1 and is accommodated in a single non-magnetic layer 14 (Fig. 2, column 2, line 65), which thin-film magnetic head includes a lower yoke 2 (Column 2, line 50), a magnetoresistive element 7 (Fig. 2, Column 2, lines 59-60), an upper yoke 10 (Column 2, lines 61-62), electrode terminals 8 and 9 (Column 2, lines 60-61); an auxiliary

member 16 made of non-magnetic material (Fig. 2; column 3, lines 1-2) which sandwiches the non-magnetic layer 14 between the auxiliary member 16 and the base member 1, and a slider surface (Left side of 100 in Fig. 2) on which magnetic tape slides in a first direction along which the base member 2, the non-magnetic layer 14, the auxiliary member 16 are arranged.

With regard to claim 2, Matsuzono et al shows that thin-film magnetic head 3 is a magnetoresistive head (column 2, lines 59-60).

With regard to claim 4, Nagata et al further shows that the auxiliary member 16 is bonded to the non-magnetic layer 14 and is adjacent to an upper position of the base member 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al as applied to claim 1, further in view of Isomura et al (US 5,227,940).

With regard to claim 3, Nagata et al shows a magnetic head device as described above, but does not specify that in this device the non-magnetic layer on the slider surface has an area of 0.02 mm X 0.008 mm or less.

Isomura et al shows a magnetic head device, wherein the non-magnetic layer 2 (Fig. 1, column 14, line 32) has a thickness $b = 2 \times 10^{-6}$ mm (Column 16, line 8), and a

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length of the widthwise contour, which is less than $2d=0.04$ mm (Column 16, line 4); the area of the non-magnetic layer on the slider surface is less than

0.000002 mm X 0.04 mm,

which is less than 0.02 mm X 0.08 mm. It would have been obvious at the time the invention was made to one of ordinary skill in the art to set the area of the non-magnetic layer on the slider surface in Nagata et al's device being 0.02 mm X 0.08 mm or less. The rationale is as follows: no unexpected effect resulted from the specific numbers of 0.02 mm X 0.08 mm was disclosed in this Application. One of ordinary skill in the art would have been searching for the size of the area through experimentation and optimization. Isomura et al discloses a similar magnetic head device, wherein the size of the area of the non-magnetic layer on the slider surface is less than 0.000002 mm X 0.04 mm, which is less than 0.02 mm X 0.08 mm. One of ordinary skill in the art would have been motivated to find a usable size of the area through experimentation and optimization, which would include the numbers disclosed by Isomura et al, which is less than 0.02 mm X 0.08 mm.

Response to Arguments

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is (703) 305-7499. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is (703)746-6037.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

A handwritten signature in cursive script, appearing to read "Chen Tianjie".

Tianjie Chen
Primary Examiner
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11/21/2003